

No amendments are being made in the present response. The following listing of claims is provided for the convenience of the Patent Office.

Listing of Claims

1. (Previously Presented) Method of preparing a pressure-sensitive adhesive comprising the steps of:
 - (i) providing an essentially solvent-free mixture comprising one or more free radically polymerizable monomers having one ethylenically unsaturated group and at least one free-radical polymerization initiator, wherein the essentially solvent-free mixture comprises less than about 20 weight percent solvent,
 - (ii) partially polymerizing said mixture to provide a partially polymerized mixture exhibiting a Brookfield viscosity of between 1,000 and 125,000 mPa·s at 20 °C and a degree of conversion of monomers to polymer of between 30 – 60 wt. % with respect to the initial mass of the monomers prior to polymerization,
 - (iii) adding one or more free-radical radiation polymerization initiators to the partially polymerized mixture to provide a radiation-curable precursor,
 - (iv) applying the radiation-curable precursor to a substrate, and
 - (v) further polymerizing the radiation-curable precursor by subjecting it to actinic irradiation to provide said pressure-sensitive adhesive, wherein the further polymerization of the radiation-curable precursor is performed in a non-inert atmosphere.
2. (Original) Method according to claim 1 wherein the partial polymerization of the mixture is performed under essentially adiabatic polymerization conditions.
3. (Original) Method according to claim 1 wherein the radiation-curable precursor exhibits a Brookfield viscosity at 20 °C of from 1,000 to 150,000 mPa·s.

4. (Previously Presented) Method according to claim 1 wherein the one or more free-radical polymerization initiators are thermally activatable polymerization initiators.
5. (Previously Presented) Method according to claim 4 where the one or more thermally activatable free-radical polymerization initiators are selected from a group consisting of organic peroxides, organic hydro peroxides and azo-group containing compounds.
6. (Original) Method according to claim 1 where the one or more free-radical polymerization initiators are present in an amount of between 0.0005 – 0.5 wt. % with respect to the mass of the one or more monomers.
7. (Previously Presented) Method according to claim 1 wherein the one or more free-radical radiation polymerization initiators are selected from a group consisting of type I and type II photoinitiators.
8. (Original) Method according to claim 1 wherein the one or more free-radical radiation polymerization initiators are present in an amount of between 0.25 – 10 wt. % with respect to the mass of the radiation-curable precursor.
9. (Original) Method according to claim 1 wherein the polymer in the partially polymerized mixture obtained by conversion of monomers to polymer is characterized by a polydispersity M_w/M_n of between 2 and 3.
10. (Original) Method according to claim 1 wherein the polymer in the radiation-curable precursor obtained by conversion of monomers to polymer is characterized by a polydispersity M_w/M_n of between 2 and 3.
11. (Cancelled)

12. (Original) Method according to claim 1 wherein the radiation-curable precursor comprises one or more heat-activatable blowing agents.
13. (Original) Method according to claim 1 wherein upon further polymerization of the radiation-curable precursor at least 95 % of the monomers have been converted to polymer.
14. (Previously Presented) Method according to claim 1 where the substrate is selected from a group consisting of paper, textile, non-woven, polymer, metal or wood substrates.
15. (Original) Method according to claim 1 where the mixture is applied to the substrate by coating or printing.
16. (Withdrawn) Radiation-curable precursor obtainable by polymerizing an essentially solvent-free mixture comprising one or more free radically polymerizable monomers having one ethylenically unsaturated group and at least one free-radical polymerization initiator to a degree of conversion of monomers to polymer of between 30 – 60 wt. % with respect to the initial mass of the monomers prior to polymerization, and adding one or more free-radical radiation polymerization initiators to such partially prepolymerized mixture, wherein said radiation-curable precursor exhibits a Brookfield viscosity at 20 °C of from 1,000 to 150,000 mPa·s.
17. (Withdrawn) Radiation-curable precursor according to claim 16 wherein the polymer obtained by polymerizing the monomers to a degree of conversion of between 30 – 60 wt. % with respect to the mass of the monomers has a polydispersity M_w/M_n of between 2 and 3.
18. (Withdrawn) Radiation-curable precursor according to claim 16 comprising one or more thermally activatable non-encapsulated blowing agents and/or encapsulated microspheres.
19. (Withdrawn) Supported or unsupported pressure-sensitive adhesive tape comprising at least one layer of a pressure-sensitive adhesive wherein the pressure-sensitive adhesive is obtainable by a method of claim 1.

20. (Previously Presented) Method according to claim 1, wherein the radiation-curable precursor comprises less than 5 weight percent inert solvents.